

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Withdrawn) A silicon- and magnesium-containing porous hydroxyapatite, comprising three-dimensionally connected pores in size of 200 - 500 μm and having substantially a human cancellous bone structure, and comprising silicon and magnesium ions in an amount of 0.05 - 5 wt%, respectively.

Claim 2 (Currently amended) A preparation method of a silicon- and magnesium-containing porous hydroxyapatite, comprising the steps of:

(1) performing a hydrothermal treatment of a coral sample pre-treated with a NaOCl solution in an aqueous $(\text{NH}_4)_2\text{HPO}_4$ solution; and

(2) performing a solvothermal treatment of the coral sample prepared in step (1) in a saturated solution of silicon acetate in acetone, to obtain the silicon- and magnesium-containing porous hydroxyapatite,

wherein the coral sample comprises magnesium ions.

Claim 3 (Previously presented) The preparation method according to claim 2, wherein contents of silicon and magnesium in the silicon- and magnesium-containing porous hydroxyapatite obtained in step (2) are 0.05 - 5 wt %, respectively.

Claim 4 (Original) The preparation method according to claim 2, wherein the step (1) is performed at 150 - 300°C for 6 - 36 hours.

Claim 5 (Original) The preparation method according to claim 2, wherein the step (2) is performed at 100 - 250°C for 12 - 36 hours.

Claim 6 (Original) The preparation method according to claim 2, wherein the step (1) is repeatedly performed after completion of the step (2), to obtain a porous hydroxyapatite in single phase.

Claim 7 (Withdrawn) A silicon- and magnesium-containing porous hydroxyapatite used for an artificial bone including a spine or long bone, an orbital implant, or a chin implant, comprising three-dimensionally connected pores in size of 200 - 500 μm and having substantially a human cancellous bone structure, and comprising silicon and magnesium ions in an amount of 0.05 - 5 wt%, respectively.